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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,928	08/04/2003	Keigo Maki	P/2850-81	4958

7590 08/18/2008  
Attention: Robert C. Faber  
OSTROLENK, FABER, GERB & SOFFEN  
1180 Avenue of the Americas  
New York, NY 10036-8403

EXAMINER
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MACARTHUR, SYLVIA

ART UNIT	PAPER NUMBER
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1792

MAIL DATE	DELIVERY MODE
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08/18/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/633,928	<b>Applicant(s)</b> MAKI, KEIGO	
	<b>Examiner</b> Sylvia R. MacArthur	<b>Art Unit</b> 1792	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 5-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 5-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Response to Arguments***

1. Applicant's arguments with respect to claims 1, 3, and 5-9 have been considered but are unpersuasive. Namely, applicant argues on page 7, first full paragraph that the prior art fails to teach that the insulative layer and bonding agent layer are sealed from the outside. The term sealed as claimed did not insinuate that the structure in terms of location of the insulating sprayed layer and bonding agent layer offer protection or prevent plasma or corrosive gas from reaching the inner electrodes and layers as recited in the Remarks of page 7. For purposes of clarity, applicant should further recite what is meant by sealing and what "outside" is referred to. For purposes of clarity, the examiner interpreted outside to mean outside or external to the chamber and since the susceptor is housed within a chamber it is sealed or protected from the atmosphere external to the chamber.

***Claim Rejections - 35 USC § 103***

2. Claims 1, 3, and 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroshi (JP 2001-313331, using the Computer Generated English Translation) in view of Kanno et al (US 6,677,167) and Harada et al (US 6,771,483).

Regarding claims 1 and 3: The prior art of Hiroshi teaches an electrostatic attraction device, see Fig. 4 for example.

The susceptor device 1 comprises a ceramic base body 3 having a first main surface which serves for mounting a plate sample thereon; and a second main surface; an inner electrode 7 which is disposed on the second main surface of the ceramic base body; an electricity supplying terminal 9 which is connected to the inner electrode electrically; an insulating sprayed layer 8, formed by a sprayed ceramic, which covers the inner electrode, a connecting section of

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the inner electrode and the electricity supplying terminal; a temperature controlling section 2 which is disposed beneath the insulating sprayed layer and has flow paths 10 inside of the temperature controlling section for circulating a medium for controlling the temperature of the medium and the insulating sprayed layer and the bonding agent layer are sealed from the outside, wherein the insulating sprayed layer and the temperature controlling section are attached via a bonding agent layer 5; the ceramic base body and the temperature controlling section are formed unitarily.

The prior art of Hiroshi fails to teach a) the insulating sprayed layer having a thickness in a range of 20 to 500 micrometers, b) a convex fitting section disposed on a peripheral section on either one of the ceramic base body or the temperature controlling section; and c) a concave fitting section disposed on a peripheral section of the ceramic base body or the temperature controlling section so that the convex fitting section and the concave fitting section engage together.

The prior art of Kanno et al teaches a convex part and concave part on the peripheral section of the ceramic base body, see silicon ring 32 and (stepped shape on edge of susceptor) 76. The motivation to modify the apparatus of Hiroshi to provide the convex concave configuration of Kanno et al is as a way for the ring to mate with susceptor. The motivation to provide the ring 32 is that it acts as a focus ring to ensure that the treatment is uniform along the surface of the wafer see col. 12 lines 36-51. Thus, it would have been obvious for one of ordinary skill in the art at the time of the claimed invention to provide the focus ring of Kanno et al on the periphery of the susceptor of Hiroshi.

The prior art of Kanno et al further teaches a wafer processing apparatus, see for example Fig.13 wherein an insulating layer has a thickness of 1mm formed by spray coating see col.3 lines 27-37, but fails to teach the claimed range of thickness.

The prior art of Harada et al teaches an electrostatic chuck with a thickness of 100-500 micrometers see col. 3 lines 26-33. The motivation to modify the apparatus Hiroshi to have the insulation layer 8 of the claimed thickness is that this layer must be dense and of the optimal dimension to ensure that the properties of electric insulating, corrosion resistance and resistance to plasma erosion are effective, see col.5 lines 1-27.

Thus, it would have been obvious for one of ordinary skill in the art at the time of the claimed invention to combine the teachings of Kanno et al and Harada et al in order to provide the susceptor device of the claimed invention.

Regarding claim 5: This claim is interpreted as a product by process claim in that the method used to create the sprayed layer does not structurally limit the layer. The layer of Hiroshi as modified by Kanno et al and Harada et al could have been created by plasma jet spray.

Regarding claim 6: See [0021] of Hiroshi.

Regarding claims 7-9: See Fig. 4 of Hiroshi and the rejection of claim 1 above.

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sylvia R. MacArthur whose telephone number is 571-272-1438. The examiner can normally be reached on M-Th during the hours of 8 a.m. and 4:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on 571-272-1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

August 13, 2008

/Sylvia R MacArthur/  
Primary Examiner, Art Unit 1792